MICRONETIXX COMMUNICATIONS

- **Low Group Delay True Center Fed Design**
- **Wide Range of Standard And Custom Azimuth Patterns**
- **Available In 8 To 32 Bay Models, In 2 Bay Increments**
- **10 to 65 kW Input Power Ratings**
- **Horizontal, Elliptical and Circular Polarization**

DL Series UHF Top Mount Slot Antennas

Micronetixx Communications offers a complete line of top mounted UHF slot antennas available from 400 to 800 MHz (Band IV). The three base DL series models have power input ranges from 10 to 65 kW average power. The DL series antennas are true center fed to provide the lowest group delay characteristics, and to provide a flat low V.S.W.R. profile over a 6 or 8 MHz band. Dual channel versions are available.

The antennas are built in two bay increments, allowing you to get the exact elevation gain you need. Each antenna is custom built to the beam tilt and null fill specifications needed to ensure the best coverage. A wide range of azimuth patterns available, along with the choice of elliptical, circular, or horizontal polarization.

2030 Series – Low Power

The 2030 series of antennas are low power UHF slot antennas, with a standard input rating of 10 kW average. The 2030 antennas are center fed and have a 3-1/8” EIA input flange. The antennas are true center fed to provide the lowest group delay performance.

Bottom of stacked DL series antenna

The 2030 series antennas come in a wide variety of standard and custom azimuth patterns. The 2030 series antennas are available in two bay increments from 8 to 32 bays, with either single or dual channel bandwidth. Each antenna is built to custom beam tilt and null fill specifications, with a choice of horizontal, elliptical or circular polarization.

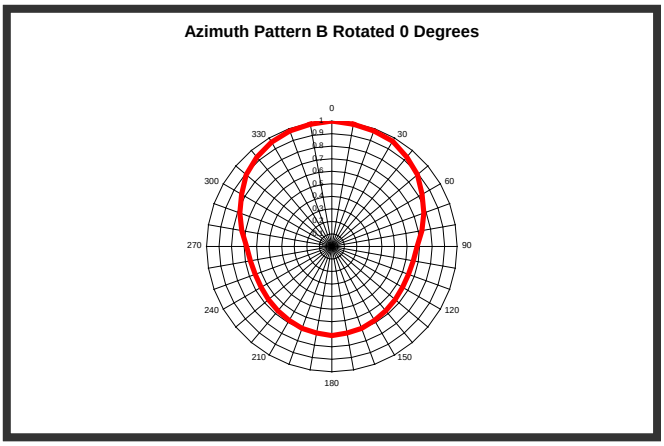
2050 Series – Medium Power

The 2050 series of medium power antennas are built the same way the 2030 series is, and use a 4-1/16” EIA Flange input to achieve an input power rating of 25 kW average. Some 2050 series antennas may be customized with up to a 40 kW input power rating. A typical 24 bay 2050 antenna with a cardioid pattern will produce an ERP of over 1000 kW. Standard and extended radomes options are available on a number of 2050 antenna designs.

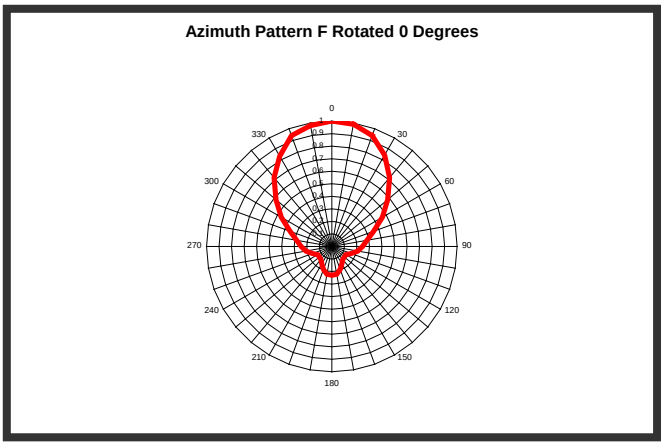
2070 Series – High Power

The 2070 series is our highest power side antenna, and shares the same attributes of the 2030 and 2050 series. The 2070 series has a 65 kW input power rating, using a 6-1/8” EIA Flange. The 2070 series antennas are also available in 75 Ohm versions, and with a 7-3/16” Input. In addition to the O3 Omni-directional pattern, these antennas are available in four and five slot around Omni-directional patterns.

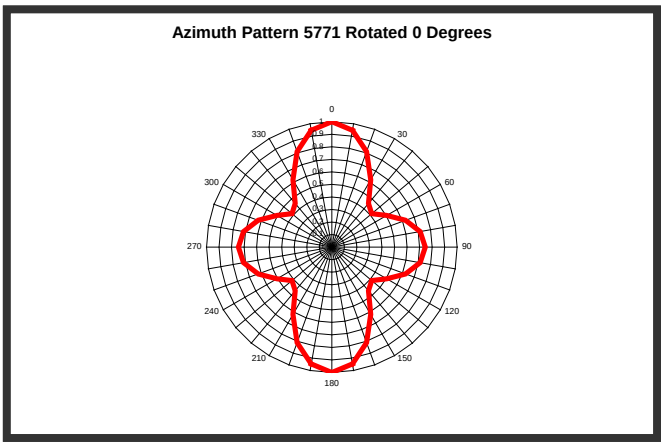
Sample Azimuth Patterns



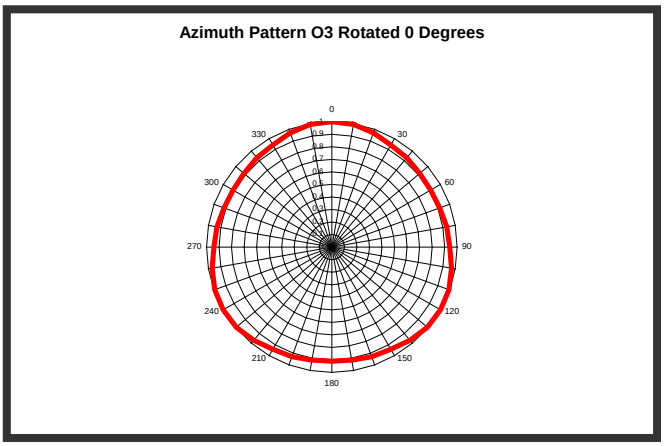
B Pattern – Gain 1.70 (2.30 dB)



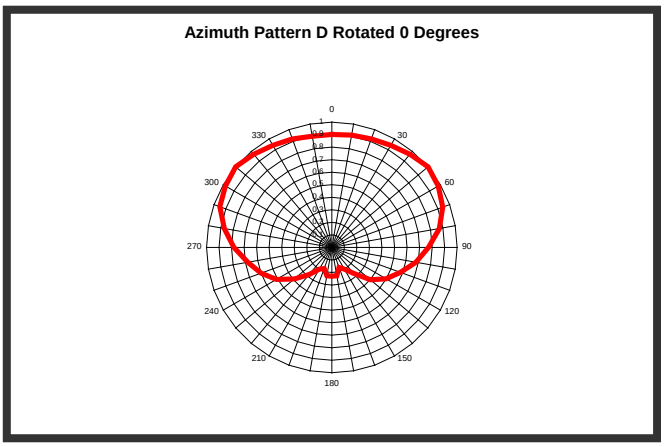
F Pattern – Gain 3.80 (5.80 dB)



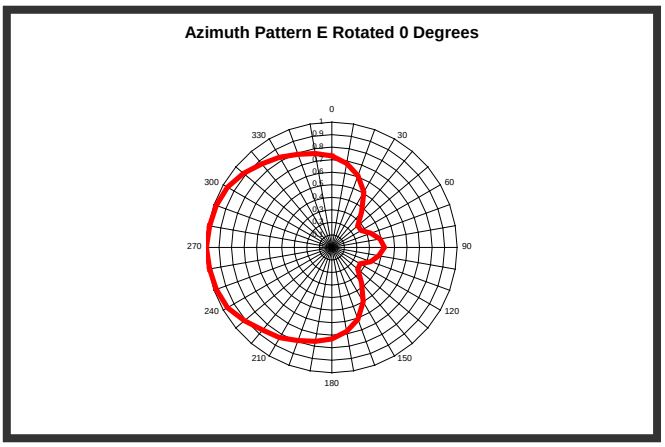
2771 Pattern – Gain 2.10 (3,22 dB)



O3 Pattern – Gain 1.13 (0.53 dB)

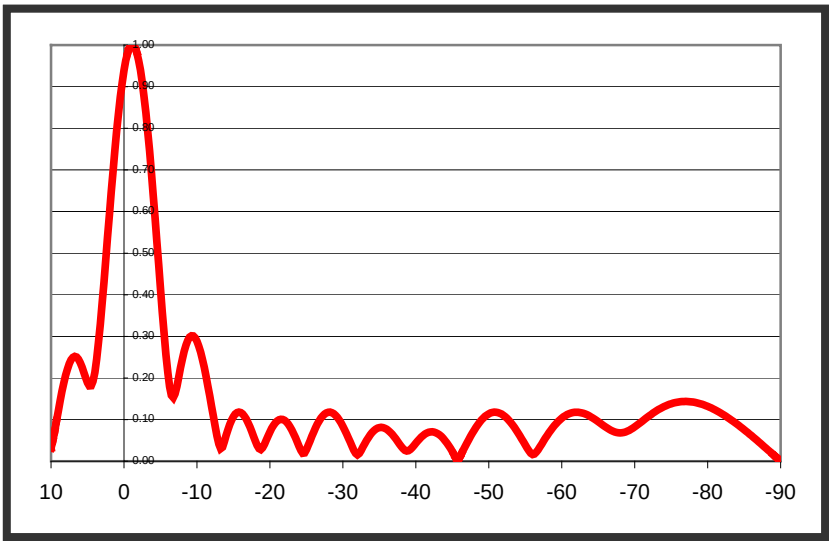


D Pattern – Gain 1.90 (2.70 dB)



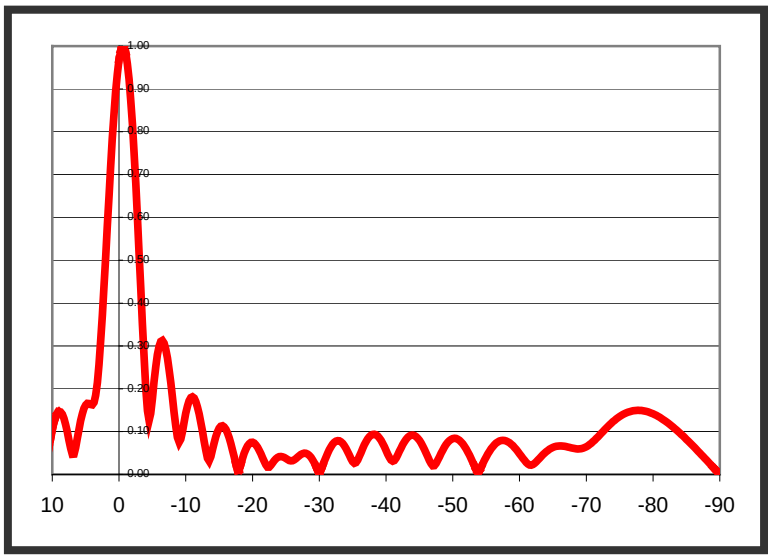
E Pattern – Gain 1.95 (2.90 dB)

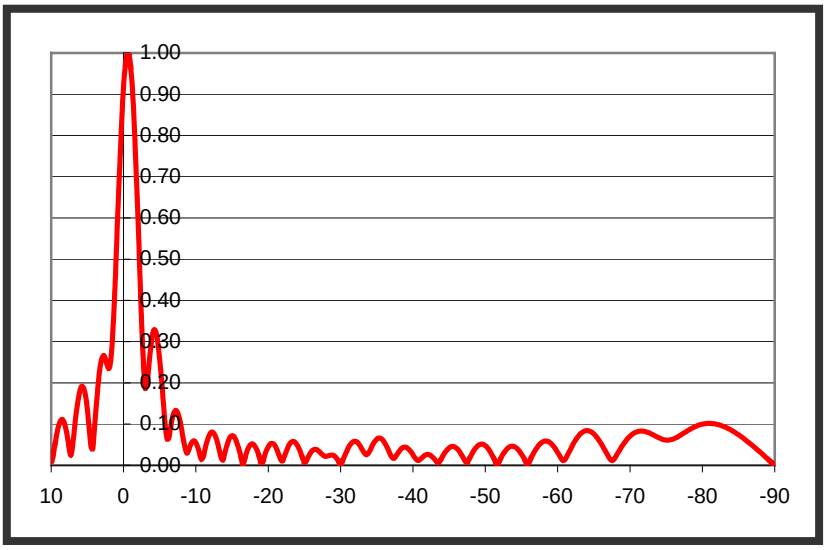
Sample Elevation Patterns



10 Bay 1.2 Degree Beam Tilt. Gain 10.44 (10.18 dB)

14 Bay 0.6 Degree Beam Tilt. Gain 14.40 (11.58 dB)





22 Bay 0.6 Degree Beam Tilt. Elevation Gain 22.50 (13.52 dB)

DL Series Antenna Options

Each DL series antenna is built to the customer's specifications. The DL series antennas are available in two bay increments up to 32 bays. In addition to our full range of bay sizes, the DL antennas are available in a wide range of azimuth patterns. In many cases, to maximize coverage for a client, we can modify or customize an azimuth pattern.

ATSC-M/H transmission is optimized with the use of circular or elliptical polarized antennas. We can build the DL series with a vertical component from 20% to 100%. In many cases, going to elliptical or circular polarization only adds 40 pound of weight with no increase in wind load area.

For transmission sites with high environment conditions, we can customize the radome system to extend it out farther from the slots. The DL series antennas use rugged UV stabilized Polyethylene for the radome. International Orange, Light Gray and White radomes are available.

Some of the DL series antennas can be built for dual or even triple channel operation. The DL series antennas can be stacked with other DL series or TPV series VHF antennas. The DL series of antennas can be supplied with a flange mount or a bury section to match the mechanical footprint of the tower. High wind zone antennas, rated up to a 130 M.P.H. basic wind speed are available. We also build low RFR versions of the DL series antennas for short tower and building mount applications.

70 Commercial Street ~ Lewiston, ME 04240 V 207-786-2000
www.micronetixx.com/ANTENNAS